Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A honeycomb structure comprising:

honeycomb segments separated by porous partitions and having circulation holes through the honeycomb segments in an axial direction;

a spacer positioned between neighboring honeycomb segments of the honeycomb segments; and

a bonding layer located between honeycomb segments where the spacer is positioned and bonding the neighboring honeycomb segments,

wherein the spacer has Young's modulus in a range of 0.1 to 1.5 GPa, wherein a ratio of area of the spacer to area of the bonding layer between respective neighboring honeycomb segments is in a range of 0.2 to 30%.

- (Original) The honeycomb structure according to claim 1,
 wherein the spacer has porosity of 35 to 90 %.
- (Original) The honeycomb structure according to claim 2,
 wherein the spacer includes a pore-forming material.
- 4. (Previously Presented) The honeycomb structure according to claim 2, wherein the spacer is formed of ceramics.
- 5. (Currently Amended) The honeycomb structure according to claim 1, wherein the Young's modulus is in a range of 0.15 to 1.2 GPa-GPa.
- 6. (Original) The honeycomb structure according to claim 1, wherein the ratio of area of the spacer to area of the bonding layer is in a range of 0.4 to 25 %.

7. (Original) A method of manufacturing a honeycomb structure, comprising the steps of:

positioning a spacer with Young's modulus of 0.1 to 1.5 GPa on a joining face as an outer peripheral face of a honeycomb segment which is separated by a porous partition and has circulation holes through the honeycomb segment in an axial direction, with a ratio of area of the spacer to area of the joining face in a range of 0.2 to 30 %;

plastering a bonding material on the joining face having the spacer fixed to the joining face;

stacking another honeycomb segment on the joining face to form a honeycomb-segment stacked assembly; and

applying a pressure to the honeycomb-segment stacked assembly from the outside to bond the honeycomb segment and said another honeycomb segment to each other.

- 8. (Original) The method of manufacturing a honeycomb structure according to claim 7,

 wherein, as the spacer, a spacer with porosity of 35 to 90 % is used.
- 9. (Original) The method of manufacturing a honeycomb structure according to claim 8,
 - wherein the spacer is controlled in porosity by a pore-forming material.
 - (Previously Presented) The honeycomb structure according to claim 3,
 wherein the spacer is formed of ceramics.